

CA

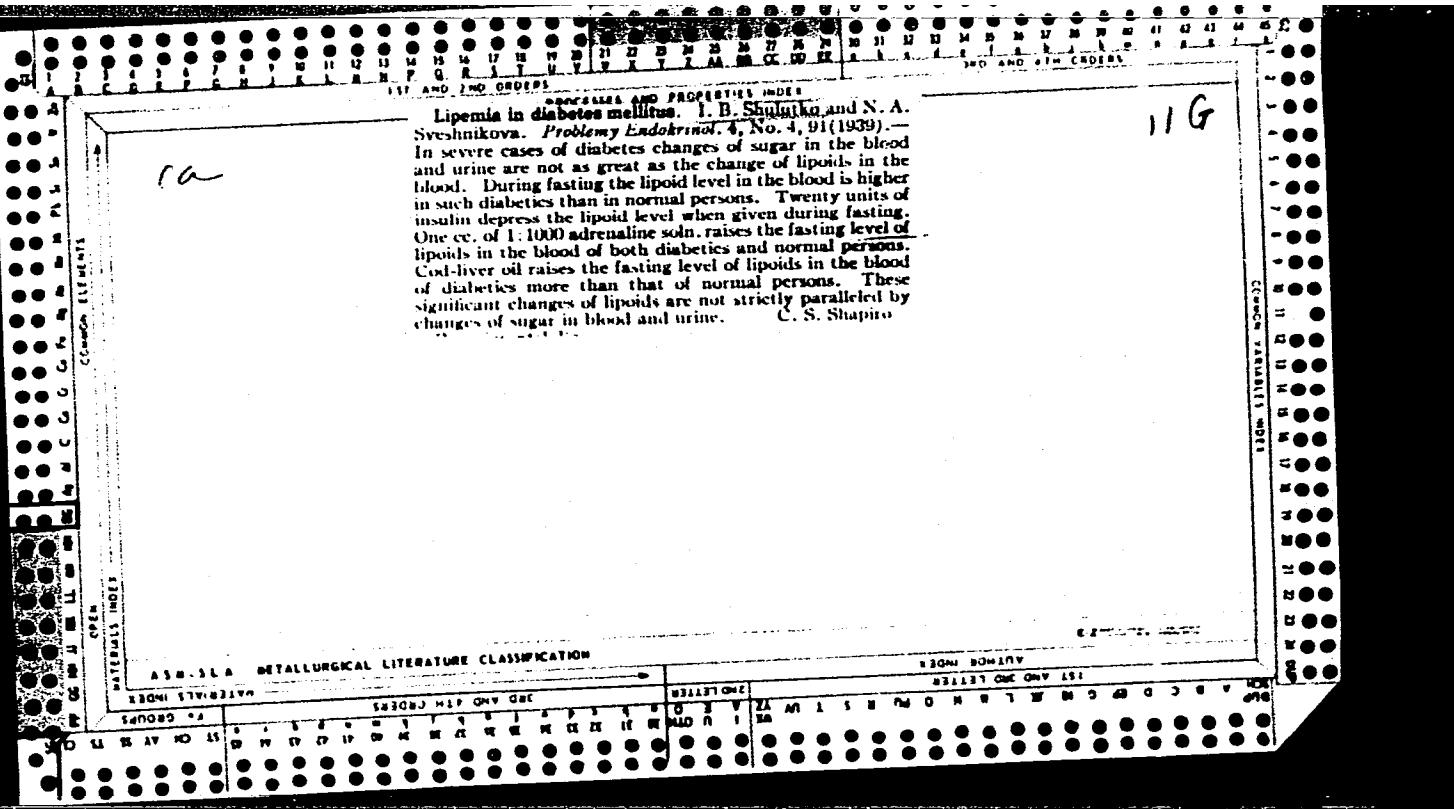
11b

Intermediate metabolism in the administration of amino acids. II. The influence of glycine upon some manifestations of diabetes. A. L. Yudeles, I. B. Shulutko and D. A. Koretskii. *Arch. sci. biol. (U. S.S.R.)* 40, No. 3, 119-23 (in English 123) (1938); cf. *C. A.* 31, 30727. — A small transient drop of the blood and urine sugar was observed in a few cases. Symptomatic improvement was noted in one case treated continuously for a long period with glycine. No insulin-like action of glycine was observed. W. A. Perlzweig

ASH-MSLA METALLURGICAL LITERATURE CLASSIFICATION

Lipemia in diabetes mellitus. I. B. Shul'nikova and N. A. Sveshnikova. *Problemy Endokrinii*, 4, No. 4, 91 (1939).—In severe cases of diabetes changes of sugar in the blood and urine are not as great as the change of lipoids in the blood. During fasting the lipid level in the blood is higher in such diabetics than in normal persons. Twenty units of insulin depress the lipid level when given during fasting. One cc. of 1:1000 adrenaline soln. raises the fasting level of lipoids in the blood of both diabetics and normal persons. Cod-liver oil raises the fasting level of lipoids in the blood of diabetics more than that of normal persons. These significant changes of lipoids are not strictly paralleled by changes of sugar in blood and urine. C. S. Shapiro

116



SHULUTKO, I. B.

20090 SHULUTKO, I. B. K Klinike i terapii tyazhelykh form nefritov. Bvachev.
delo, 1949, No. 6, stb. 515-20.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

SHULUTKO, I.; MEDVEDEVA, T.; MATROSOVICH, D.

Involvement of the gallbladder in gastroduodenal ulcers.
Klin. med., Moskva 29 no.8:42-44 Aug 1951. (CML 20:11)

1. Of the First Department of Internal Diseases (Head --
Honored Worker in Science Prof. Ya. A. Lovtskiy), State
Order of Lenin Institute for the Advanced Training of
Physicians imeni S. M. Kirov.

SHULUTOV, I. B., professor TOLVACH D. V. author: SHKLOVSKY V. M.
Determination for treating peptic ulcers Vrach.delo no. 11 9/1984 p. 142
USSR, Moscow, 1984
1. Konsil'yia po vnutrennim bolez'ym (advice on internal diseases)
Saratovskiy meditsinskij institut
(PEPTIC ULCER) (NERVOUS SYSTEM, HYPOTHETIC)

SHULUTKO, I.B., prof.

Treatment of gastric and duodenal ulcers with ganglion-blocking agents [with summary in English]. Terap.arkh. 31 no.3:9-13 Mr '59.
(MIRA 12:4)
1. Iz kafedry gospital'noy terapii Kalininskogo meditsinskogo insti-
tuta.

(PEPTIC ULCER, ther.
1,6-dimethylpipecolic acid deriv. (Rus))

(PIPERIDINES, ther. use,
1,6-dimethylpipecolic acid deriv. in peptic
ulcer (Rus))

SHULUTKO, I.B.; TOLMACH, D.V.; SHKLOVSKAYA, Ye.N.

Treatment of peptic ulcer of the stomach and duodenum with dioquine.
(MIRA 15:1)
Khim. i med. no.15:102-106 '60.

1. Iz kafedry fakul'tetskoy terapii (zav. kafedroy - prof. I.B.
Shulutko) Stalinskogo meditsinskogo instituta imeni A.M.Gor'kogo.
(PEPTIC ULCER) (DIOQUINE - THERAPEUTIC USE)

SHULUTKO, I.B., prof.

Some considerations concerning better training of postgraduate
students in a therapeutical clinic. Biul. Uch.med. sov. 3 no.2:
20-21 Mr-Ap '62. (MIRA 15:4)
(MEDICINE--STUDY AND TEACHING)

SHULJUTKO, I.B., prof.

Diuretic effect of allacyl. Kaz.med.zhur. no.1:27-28 Ja-F'63.
(MIRA 16:8)

1. Kafedra gospital'noy terapii Kalininskogo meditsinskogo
instituta.
(DIURETICS AND DIURESIS) (AMINOMETRADINE)

SHULJUTKO, I.B., prof.

Second Scientific Conference of Therapeutists of the Northwest
Provinces of the R.S.F.S.R. Terap. arkh. 35 no.5:113-114 My'63
(MIRA 16:12)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210008-9

SHULUTKO, I.B.

Effect of nitroanal in engine pectoris. Akim. i med. no. 16:29-37
(MIRA 17:8)
1963.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210008-9"

SHULUTKO, I.B., prof.

Treatment of angina pectoris with the antispastic preparation
erinit. Trudy KGMI no.10:221-225 '63. (MIRA 18:1)

I. Iz kafedry gospital'noy terapii (zav. kafedroy - prof. I.B.
Shulutko) Kalininskogo gosudarstvennogo meditsinskogo instituta.

SHULUTKO, L.I., professor, zasluzhennyj deyatel' nauki Tatarskoy ASSR.
(Kazan')

Prevention of agricultural trauma in machine-tractor station
workers. Sov. med. 18 no.10:36-37 0 '54. (MLRA 7:11)
(ACCIDENTS,
agriculture, prev. & control in Russia)
(AGRICULTURE,
accid., prev. & control in Russia)

SHULUTKO, L.I.

AID P - 1493

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 8/19

Author : Shulutko, L. I., Prof., "Honored scientist" of the Tatar ASSR

Title : Role of medical and epidemiological stations in the prophylaxis of traumatic injuries in agriculture

Periodical : Gig. i san., 2, 39-42, F 1955

Abstract : Discusses measures for preventing injuries among agricultural workers. With the mechanization of farm work, traumatic cases become more frequent. Therefore the author gives recommendations for the improvement of medical service in rural localities, and enumerates its main tasks.

Institution: None

Submitted : Je 28, 1954

SHULUTKO, Lazar' Il'ich

[Intramedullary nailing] Ob intramedulliarnom metallicheskom
osteosinteze. Kazan', Tatkniigoizdat, 1957. 14 p. (MIRA 13:4)
(INTERNAL FIXATION IN FRACTURES)

SHULUTKO, L.I.

"Prevention of accidents and the organization of emergency care" by
S.IA. Freidlin. Reviewed by L.I. Shulutko. Zdrav.Rus.Fed. 1 no.7:
29-31 Jl '57. (MIRA 12:12)

(ACCIDENTS--PREVENTION)

SHULUTKO, L.I., prof. (Kazan')

"Problems in using plastics in medicine"; collection of articles
edited by N.N.Priorov [chlen-korrespondent AMN SSSR, zasluzhennyj
deyatel' nauki, prof.]. Reviewed by L.I.Shulutko. Ortop. travm. i
protez. 18 no.6:53-56 N-D '57. (MIRA 11:4)
(PLASTICS) (PROSTHESIS) (PRIOROV, N.N.)

SHULUTKO, L.I., prof.

Professor M.O. Fridland; on his 70th birthday. Ortop.travm. i
protez. 19 no.4:81-82 JI-Ag '58 (MIRA 11:11)
(FRIDLAND, MIKHAIL OSIPOVICH, 1888-)

SHULUTKO, L.I., prof. zasluzhennyj deyatel' nauki TASSR (Kazan')

Some impressions from a visit to the People's Bulgaria.
Ortop. travm. i protez. 19 no.5:98-101 S-0 '58 (MIRA 11:12)
(BULGARIA--ORTHOPEDICS)

SHULUTKO, L.I., prof. (Kazan')

"Voprosy travmatologii i ortopedii," no.4. Reviewed by L.I. Shulutko.
Ortom. travm. protez., Moskva 19 no.6:86-87 N-D '58. (MIRA 12:1)
(ORTHOPEDIA)

SHULUTKO, L.I., prof.; TARNOPOL'SKIY, Ya.I., kand.med.nauk

Organization of measures to control agricultural injuries under the
new conditions. Sov.med. 23 no.8:132-135 Ag '59. (MIRA 12:12)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta travmatologii i
ortopedii (dir. - prof. L.I. Shulutko).
(AGRICULTURAL WORKERS wounds & inj.)

SHULUTKO, L.I., prof. (Kazan')

All-Union Conference of Surgeons, Traumatologists, and
Anesthesiologists. Khirurgija 35 no.2:118-120 F '59.
(MIRA 12:5)

(SURGERY--CONGRESSES)

SHULUTKO, L.I., prof. (Kazan')

International Congress of Orthopedists in Prague. Kaz.-med.
zhur. 40 no.2:95-97 Mr-Ap '59. (MIRA 12:11)
(ORTHOPEDIA--CONGRESSES)

SHAHIRO, B. I., Razani, S. S. *On the function $\pi_{\alpha}(x)$ in the theory of distributions* *Proc. Roy. Irish Acad. Sect. A* 63 (1963) 1-12.

"Problems of Bone Graft Surgery in Bridging Longitudinal Defects from Loss of Bone Substance."

report submitted for the Eighth Congress, Intl. Society of Surgery (Orthopedic) and Traumatology, New York, N.Y., 4-10 Sep 60.

SHULUTKO, L.I., prof.; TARNOPOL'SKIY, Ya.I., kand.med.nauk

Prevention of industrial accidents in the petroleum industry of the
Tatar A.S.S.R. Kaz.med.zhur. no.5:74-77 S-0 '60. (MIRA 13:11)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta travmatologii
i ortopedii.
(TATAR A.S.S.R.--PETROLEUM INDUSTRY AND TRADE--ACCIDENTS)

KHARITONOV, I.F., doktor med.nauk (Kazan'); RATNER, Yu.A., prof. (Kazan'); SHUBIN, V.N., prof. (Kazan'); SHULUTKO, L.I., prof. (Kazan'); ROZENGARTEN, M.Yu. (Kazan')

Twenty-seventh All-Union Congress of Surgeons. Kaz.med.zhur. no.5:
96-99 S-0 '60. (MIRA 13:11)
(SURGERY--CONGRESSES)

SHULUTKO, L.I., prof. (Kazan')

Problem of scoliosis at the Second International Congress of
Orthopedists. Kaz. med. zhur. no.6:74-76 N-D '60. (MIRA 13:12)
(ORTHOPEDIA—CONGRESSES) (SPINE—ABNORMALITIES AND DEFORMITIES)

SHULUTKO, L.I., zasluzhennyy deyatel' nauki, prof.; TARNOPOL'SKIY, Ya.I.,
kand.meditinskikh nauk

Basic principles in the prevention of agricultural injuries under
new conditions. Ortop. travm. i protez, 21 no. 7:66-71 J1 '60.
(MIRA 13:10)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta travmatologii
i ortopedii (dir. - prof. L.I. Shulutko).
(AGRICULTURE--ACCIDENTS)

SHULUTKO, L.I.

Our method for the treatment of ankylosing spondylo-arthritis.
Acta chir. orthop. traum. cech. 27 no.2:172-177 1960
(SPONDYLITIS ANKYLOSING surg.)

SHULUTKO, L.I.

Surgical treatment of scoliosis. Khirurgiia 36 no.6:13-17 Je '60.
(MIRA 14:3)
(SPINE-SURGERY)

SHULUTKO, L.I., prof. (Kazan')

Conservative treatment of fresh closed bone fractures. Ortop.,
travm.i protez. no.7:14-18 '61. (MIRA 14:8)
(FRACTURES)

SHULUTKO, L.I. prof. (Kazan')

We are intensifying the fight against agricultural transuatism. Med.
sestra 20 no.7:42-44 Jl '61. (MIRA 14:10)
(AGRICULTURE--ACCIDENTS)

SHULUTKO, L.I., prof. (Kazan')

Second International Congress on Rehabilitation. Kaz.med. zhur.
no.2:89-93 Mr-Ap'63 (MIRA 16:11)

MEDVEDEV, N.P., prof. (Kazan'); SHULUTKO, L.I. prof. (Kazan').

Second All-Russian Congress of Surgeons. Kaz.med. zhur. No.2:
93-97 Mr-Ap'63 (MIRA 16:11)

*

SHULJUTKO, L.I. (Kazan:)

Review of B.Sh. Tseterelli's book "Agricultural traumatism
in the Georgian S.S.R. and measures for its control."
Sovet. zdravookhr. 5:81-84 '63 (MIRA 17:2)

SHULUTKO, L.I., prof. (Kazan'); BLOKHIN, V.N., dotsent (Moskva)

Second International Congress on Rehabilitation, Dresden,
June 11 to 15, 1962. Ortop., travm. i protez. 24 no.3:91-94
Mr '63. (MIRA 17:2)

SHULUTKO, L.I., prof. (Kazan', ul. Zhukovskogo, d.28, kv.27)

Problem of metal osteosynthesis. Ort. travm. i protez. 23
no.10:3-10 O '62. (MIRA 17:10)

SHULUTKO, I.I., prof. (Kazan', ul. Zhukovskogo, d.23, kv.27)

Defectiv posture and scoliosis. Ortop., travm. i protez. 25
no.5:56-60 My '64. (MIRA 18:4)

VILKOV, M.V. (Moskva); SHULUTKO, I.I. (Kazan')

Ninth International Congress on Orthopedic Surgery and Traumatology.
Ortop., travm. i protez. 25 no.5:84-89 My '64.
(MIRA 18:4)

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CIA-RDP86-00513R001550210008-9

ZATSEPIN, S.T., kand. med. nauk; SHULUTKO, L.I., prof., zasluzhennyy deyatel'
nauki (Kazan')

Reports. Ortop., travm. i protez. 26 no.7:82-91 Jl '65. (MIRA 18:7)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550210008-9"

DEPP, M.Ye., starshiy nauchnyy sotrudnik; SHULUTKO, L.S., nauchnyy sotrudnik
Preservation and transfusion of blood enriched with oxygen. Akt.vop.
perel.krovi no.4:77-78 '55. (MIRA 13:1)
1. Laboratoriya stabilizatsii krovi Leningradskogo instituta pereli-
vaniya krovi (zav. laboratoriye - starshiy nauchnyy sotrudnik M.Ye.
Depp). (BLOOD--TRANSFUSION) (OXYGEN)

SHULUTKO, L.S., nauchnyy sotrudnik

Treatment of slow healing ulcers with blood preparations. Akt.vop.
perel.krovi no.4:167-169 '55. (MIRA 13:1)

1. Khirurgicheskaya klinkia Leningradskogo instituta perelivaniya
krovi (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR, prof.
A.N. Filatov).
(BLOOD AS FOOD OR MEDICINE) (TIBIA--ULCERS)

SHULUTKO, L.S.

SHULUTKO, L.S.

Studies on the survival of transfused blood in the blood stream of
the recipient. [with summary in English, p.61] Probl. gemat. i perel.
krovi 2 no.6:45-50 N-D '57. (MIRA 11:2)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta perelivaniya
krovi (dir. - dots. A.D.Belyakov, nauchnyy rukovoditel' - chlen-
korrespondent AMN SSSR prof. A.N.Filatov)
(BLOOD TRANSFUSION,
adaptability of transfused blood (Rus))

COUNTRY :USSR T
CATEGORY :Human and Animal Physiology, Blood
AES. JOUR. : RZhBiol., №. 5 1959, №. 21959
AUTHOR :Shulutko, L.S.
INST.
TITLE :The Effect of the Preservation Media and Storage
Period of Preserved Blood on Erythrocyte Survival
in the Blood Stream of the Recipient.
CRIG. PUB. :V sb.: Aktual'n. vopr. pereliv. krovi. Vyp. 5.,
Leningrad, 1957, 45--51
ABSTRACT : The life-span of transfused erythrocytes in
164 recipient rabbits was the object of the in-
vestigation. The erythrocytes were labelled by
injecting Fe⁵⁹, S³⁵ or Cl⁴¹ intravenously into the
donor rabbits. Blood taken from 40 donor rabbits
was preserved in different stabilizers for varying
periods of time. The radioactivity of the blood of
the recipient rabbit immediately after the trans-
fusion was taken as 100%. The subsequent release
of the transfused blood into the general circula-
tion was determined as the ratio of the activity
1/5

Card: T-36

CCNTRY : USSR T
CATEGORY :
ABS. JOUR. : RZhBiol., No. 5 1959, No. 21959
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : of the blood at a given moment to the activity determined immediately after the transfusion. The stabilizers employed were solutions of glucose and citrate, glucose, citrate and antiseptics, citrate with alcohol and sugar additives. When fresh blood was transfused, the maximal rise in relative activity of the transfused blood in the general circulation of the recipient rabbit was detected after 2 hours and attained a value of 113% in relation to the initial activity; at 7 hours after the transfusion it had fallen to 100%. When the transfused blood had been stored for 5 days, the
Card: 2/5

COUNTRY : USSR

T

CATEGORY :

ABS. JOUR. : RZhBiol., №. 5 1959, №. 21959

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : rise in activity reached 105% of the initial value; 7 hours after the transfusion it had fallen to 80%. Including antiseptics in the preservation medium was without effect on the survival of the transfused blood. When blood from the same donor animals was used, but stored in solutions containing alcohol (no. 31°), the maximal rise in relative activity of the transfused blood came to 128% of the initial level; at 7 hours after the transfusion it was 108%. The corresponding value for blood from the same donors stored in non-alcoholic solutions was 102%. Examination of blood stored in

3/3

T-37

Card:

COUNTRY : USSR

CATEGORY :

ART. JOUR. : RZBiol., No. 5 1959, No. 21959

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : alcohol-containing media showed 80% survival of erythrocytes 24 hours after transfusion, 60% at 5 days, 50% at 10 days and 30% at 20 days. The corresponding values for erythrocyte survival were 70, 50, 45 and 30%, when the transfused blood was stored in media not containing alcohol. Observations of 25 patients receiving 200 to 400 ml of blood stored in media L-6 and 31e showed a relationship between the length of time the blood was stored and its survival: 90% erythrocyte survival was assured in 5-day-old blood on the first day following the transfusion; with 20-day-old

Card: 4/5

COUNTRY : USSR
CITY/COUNTRY :
T

ARG. JOUR. : RZhBiol., №. 5 1959, №. 21959

AUTHOR :
INST. :
TITLE :
S

OPIC. PUB. :

ABSTRACT : blood the value was 60%, and for 25 to 30-day-old blood it was 30%. Erythrocytes of blood stored for 10 days in L-6 medium were detected in the recipient's blood after 65 days, while erythrocytes of blood stored for 30 days were completely destroyed 48 hours after the transfusion. Blood stored in medium 31° for 45 days showed the same survival pattern as blood kept in medium L-6 for 30 days.--M.I.Yershovich

Card: 5/5

T-38

SHULUTKO, L. S., Candidate Med Sci (diss) -- "The effect of the composition of the preservative solutions and the preservation time of blood on the viability of the erythrocytes of transfused blood in the system of the recipient (Experimental investigation using radioactive indicators)". Leningrad, 1959. 12 pp (State Order of Lenin Inst for the Advanced Training of Physicians im S. M. Kirov), 200 copies (KL, No 25, 1959, 143)

SHULUTKO, L.S., nauchnyy sotrudnik

Procurement of blood by visiting blood collectors. Akt.vop.perel.krovi
(MIRA 13:1)
no.7:63-67 '59.

1. Otdel zagotovki krovi Leningradskogo instituta perelivaniya krovi
(zav. otdelom - starshiy nauchnyy sotrudnik Ye.V. Antonova).
(BLOOD--COLLECTION AND PRESERVATION)

AKKERMAN, V.V.; TUKACHINSKIY, S.Ye.; TEODOROVICH, V.I.; CHERNOMORDIK, B.L.;
MOISEYEVA, V.P.; LUSANOVA, I.S.; SHULUTKO, L.S.; KURALEVA, V.V.;
SOKOLOVA, T.S.

Some morphological and functional properties of the blood in
patients with essential polycythemia. Probl.gemat.i perel.
(MIRA 14:6)
krovi 6 no.4:30-33 Ap '61.

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-
issledovatel'skogo instituta perelivaniya krovi (dir. - dotsent
A.D. Belyakov, nauchnyy rukovoditel' - chlen-korrespondent
AMN SSSR prof. A.N. Filatov).
(POLYCYTHEMIA) (BLOOD)

TEODOROVICH, V.I.; SHULUTKO, L.S.

Use of plastic bags for the preparation and preservation of blood components. Probl. hemat. i perel. Krovi 3 no.9:32-34 S '63.
(MTRA 17:9)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krvi (dir. - dotsent A. D. Belyukov, nauchnyy rukovoditel' - chlen-korrespondent AN SSSR prof. A. N. Filatov).

SHULUTKO, M. L.

SHULUTKO, M. L. -- "Extrapleural Pneumothorax in Treating the Cavernous Forms of Pulmonary Tuberculosis in Children and Adolescents." Acad Med Sci USSR. Sverdlovsk City Children's Tuberculosis Sanatorium No. 1. Sverdlovsk, 1955. (Dissertation for the Degree of Candidate of Medical Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

SHULUTKO, M.L.; YELOKHINA, M.L.

Surgical treatment of hypostatic abscesses in tuberculous spondylitis.
Khirurgiia 32 no.6:62-65 Je '56. (MLRA 9:10)

1. Iz Sverdlovskogo detskogo tuberkuleznogo sanatoriya No.1 (i.o. glavnogo vracha K.D.Skovortsov) i kafedry gospital'noy khirurgii (zav. - chlen-korrespondent AMN SSSR žasluzhennyy deyatel' nauki prof. A.T.Lidskiy) Sverdlovskogo meditsinskogo instituta (TUBERCULOSIS, SPINAL, compl. hypostatic abscess, surg.) (ABSCESS, etiol. and pathogen. tuberc., spinal, surg.)

GANAGO, F.M.; SHULUTKO, M.L.

Treatment of pulmonary tuberculosis with extrapleural pneumothorax
in children and adolescents. Probl.tub. 34 no.3:37-42 My-Je '56.

(MLRA 9:11)

1. Iz khirurgicheskogo otdeleniya (zav. M.L.Shulutko) Sverdlovskogo
gorodskogo detskogo tuberkuleznogo sanatoriya No.1 (i.o.glavnogo
vracha K.I.Skvortsov)

(PNEUMOTHORAX, ARTIFICIAL, in inf. and child
in child.& adolescents)

SHULUTKO, M. L., kandidat meditsinskikh nauk

Pneumonectomy in therapy of tuberculosis in children and adolescents
[with summary in English]. Khirurgiia 33 no.4:85-89 Ap '57.
(MIRA 10:7)

1. Iz legochno-khirurgicheskogo otdeleniya (zav. M.L.Shulutko)
Sverdlovskogo detskogo tuberkuleznogo sanatoriya i gospital'noy
khirurgicheskoy kliniki (zav. - chlen-korrespondent AMN SSSR
zasluzhennyy deyatel' nauki prof. A.T.Lidskiy) Sverdlovskogo
meditsinskogo instituta
(TUBERCULOSIS, PULMONARY, in inf. and child
pneumonectomy, in child. & adolescents)
(PNEUMONECTOMY, in inf. and child
in pulm. tuberc. in child. & adolescents)

SHULUTKO, M.L., kandidat meditsinskikh nauk

Pulmonary resection in treating tuberculosis in children and adolescents [with summary in French]. Probl.tub. 35 no.2:32-38 '57. (MIRA 10:6)

1. Iz legochno-khirurgicheskogo otdeleniya (zav. M.L.Shulutko) Sverdlovskogo detskogo tuberkuleznogo sanatoriya No.1 (dir. K.I. Skvortsov).

(PNEUMONECTOMY, in various dis. tuberc., pulm., in child. & adolescents (Rus))

LIDSKIY, A.T., prof. (Sverdlovsk, Bankovskiy per., d.8, kv.31); SHELOMOVA,
T.P., kand.med.nauk; SHULUTKO, M.L., kand.med.nauk

Some problems in lung surgery. Vest.khir. 79 no. 9:110-120 S '57.
(MIRA 10:11)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. A.T.Lidskiy)
Sverdlovskogo meditsinskogo instituta i khirurgicheskogo otdeleniya
Sverdlovskogo gortubdispansera.
(LUNGS, surg.
review)

SHULUTKO, M.L., kand.med.nauk

Surgical treatment of pulmonary tuberculosis in children and adolescents [with summary in English]. Vest.khir. 80 no.3:16-23
Mr '58. (MIRA 11:4)

1. Iz legochno-khirurgicheskogo otdeleniya (zav. - M.L.Shulutko, nauchnyy rukovoditel' prof. A.T.Lidskiy) Sverdlovskogo detskogo tuberkuleznogo sanatoriya No.1. Adres avtora: Sverdlovsk, 30, detskiy tuberkuleznyy sanatori No.1, d.33.

(TUBERCULOSIS, PULMONARY, surg.

methods in cavernous tuberc. in child. & adolescents
(Rus))

SHULUTKO, M.L. kand.med.nauk; SHIRYAK, M.I.

Conservative partial resection of the lung in the treatment of
tuberculosis. Probl.tub. 37 no.4:50-52 '59. (MIRA 12:10)

1. Iz legochno-khirurgicheskogo otdeleniya (zav. M.L.Shulutko,
nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR, zasluzhennyy
deyatel' nauki prof.A.T.Lidskiy) Sverdlovskogo detskogo tuberkulez-
nogo sanatoriya No.1 (glavnnyy vrach Ye.A.Korol').
(TUBERCULOSIS, PULMONARY, surg.
conservative partial resection (Rus))

SHULUTKO, M.L., kand.med.nauk (Sverdlovsk, Bankovskiy per., d.8, kv.31)

Bilateral consecutive pneumonectomy in treatment of tuberculosis
[with summary in English]. Vest.khir. 82 no.1:55-61 Ja '59.
(MIRA 12:2)

1. Iz legochno-khirurgicheskogo otdeleniya (zav. - M.L. Shulutko,
nauchn. rukovod. - prof. A.T. Lidskiy) Sverdlovskogo detskogo tuber-
kuleznogo sanatoriya No.1
(PNEUMONECTOMY, in various dis.
bilateral consecutive in oulm. tuberc. (Rus))

SHULUTKO, M.L., kand.med.nauk; ZISLIN, B.D.

Complications and causes of ineffective resection of the lungs
in patients with tuberculosis. Khirurgiia 36 no.12:97-104 '60.
(MIRA 14:1)

1. Iz legochno-khirurgicheskikh otdeleniy Sverdlovskogo detskogo
tuberkuleznogo sanatoriya No.1 (glavnnyy vrach Ye.A. Korol') i
gorodskogo tuberkuleznogo dispansera (glavnnyy vrach Z.P. Kunitsyna).
Nauchnyy rukovoditel' otdeleniy - chlen-korrespondent AMN SSSR
zasluzhennyy deyatel' nauki prof. A.T. Lidskiy.

(LUNGS—SURGERY)

SHULUTKO, M.L.; PANFILOVA, G.A.

Resection of the lung in patients with primary tuberculosis.
Probl.tub. 38 no.1:79-85 '60. (MIRA 13:10)
(LUNGS—SURGERY)

SHULUTKO, M. L., kand. med. nauk

Results of surgical interventions on adolescents with disseminated
tuberculosis of the lungs. Probl. tub. no.2:20-24 '62.
(MIRA 15:2)

1. Iz legochno-khirurgicheskogo otdeleniya (rukoveditel' - kandidat
meditsinskikh nauk M. L. Shulutko) Sverdlovskogo instituta tuberku-
leza (dir. - prof. I. A. Shklein) i detskogo tuberkuleznogo
sanatoriya No. 1 (glavnnyy vrach Ye. A. Korol')

(TUBERCULOSIS) (LUNGS--SURGERY)

SHULUTKO, M.L., kand.med.nauk; PANFILOVA, G.A., kand.med.nauk

Intrathoracic interventions in primary tuberculosis in children and adolescents. Probl. tub. 40 no.6:31-35'62
(MIRA 16:12)

1. Iz Sverdlovskego nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. I.A. Shaklein, zamestitel' direkтора po nauchnoy chasti - kand. med. nauk N.G. Butkin).

PEREL'MAN, M.I. (Novosibirsk, Akademgorodok, 2-V, kv.7); SHULUTKO, M.L.

Characteristics of the technique of surgical interventions
in primary pulmonary tuberculosis. Vest. khir. 92 no.2:
47-50 F '64. (MIRA 17:9)

1. Iz legochnogo otdeleniya (zav.-dotsent M.I. Perel'man)
Instituta eksperimental'noy biologii i meditsiny (dir.-
prof. Ye.N. Meshalkin) Sibirskogo otdeleniya Akademii nauk
SSSR i khirurgicheskogo otdeleniya (zav.-starshiy nauchnyy
sotrudnik M.L. Shulutko) Sverdlovskogo nauchno-issledovatel'-
skogo instituta tuberkuleza (dir.- prof. I.A. Shakleyn).

SHULUTKO, M.L., doktor med. nauk; ZISLIN, B.D., kand. med. nauk; KIPIANI, N.M.

Some problems of bilateral pulmonary resection in tuberculosis.
Prob. tub. no.1:26-31 '65. (MIRA 18:12)

1. Sverdlovskiy nauchno-issledovatel'skiy institut tuberkuleza
(dir.- prof. I.A. Shaklenya) i gorodskoy protivotuberkuleznyy
dispanser (glavnnyy vrach Ye.S. Gubina).

L 76369-66

FWDC-1/ENT(a)/SRC(m)-6/T

RM/WW

ACC NR: AP601119.

(A)

SOURCE CODE: UR/0413/66/000/006/0022/0022

INVENTOR: Soskind, A. S.; Shulutko, R. I.

ORG: none

TITLE: A method for fireproofing cellulose materials. Class 8, No. 179746

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 22

TOPIC TAGS: cellulose, fire resistant material, titanium compound, antimony compound

ABSTRACT: This Author's Certificate introduces a method for fireproofing cellulose materials by the application of titanium-antimony compounds with subsequent treatment. The final treatment consists of rinsing in water to simplify the technical process and improve the quality of the resultant fireproof material.

SUB CODE: 11/ SUBM DATE: 08May63/ ORIG REF: 000 OTH REF: 000

UDC: 677.46.021.921.2:678.
.029.65:546.863-31.824

Card 1/1

SHUL'YAS, M.D.

PRECIPITES AND INCLUSIONS IN

Slag inclusions in ferrous alloys. Yu. T. Lukashevich-Divanova and M. D. Shul'yas. *Repts. Central Inst. Metal. Leningrad* No. 30, 210-211 (1955); cf. C. I. 30, 7587. - Methods of seprg. slag inclusions from ferrochrome (I) and ferromanganese (II) are given. Inclusions in I amount to 0.05-1.80% and consist of silicate, oxides of Cr and Al and chrome spinel. In II, the inclusions amount to 0.2% and consist of alumina, silicate and crystals of TiO₂.

YU. T. LUKASHEVICH
DIVANOVA

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOV/137-58-10-21785

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 189 (USSR)

AUTHOR: Shul'yas, M. D.

TITLE: Determination of Aluminum Sulfides in Steel (Opredeleniye sul'fidov alyuminiya v stali)

PERIODICAL: Tr. Nevsk. mashinostroit. z-da, 1957, Nr 2, pp 74-75

ABSTRACT: The specimen is dissolved electrolytically in a hermetically sealed electrolyzer in a CO_2 atmosphere while it is suspended on a Pt, W, or Mo wire which acts as the anode. After the specimen is attached to the Pt wire, 1% NaCl, 0.1% HCl, and 0.3% $\text{KNaC}_4\text{H}_4\text{O}_6$ solutions are poured into the electrolyzer and CO_2 is passed through. The specimen is dissolved at a current density of 0.02 amp/cm² during 3 - 4 hours depending upon the sulfide content in the steel. In the process of electrolytic dissolution of steel only the Al sulfides are decomposed. After the electrolysis is completed the specimen is removed, 30 - 50 mg of HCl are added to the electrolyte, and S is determined volumetrically. The Al sulfide content in the steel is determined by multiplying the amount of S found by 1.56 and referring it to the weight of the dissolved portion

Card 1/2

SOV/137-58-10-21785

Determination of Aluminum Sulfides in Steel

of the specimen. The dissolved specimen of steel is determined by the loss in weight of the specimen after its dissolution and its cleansing of the sediment. Moreover, the distribution of Al sulfides in the mass of the steel has a substantial significance. To determine this the author proposes the following treatment of macro and micro sections: Silver-bromide paper is treated with a solution containing 1% NaCl, 0.1% HCl, and 0.3% $KNaC_4H_4O_6$ and placed on a ground or polished surface of the section. Such a paper reacts only with Al sulfides, ensuring the selective determination of their presence and distribution in the steel.

A. M.

1. Aluminum sulfide--Determination 2. Steel--Analysis

Card 2/2

SOV/137-58-10-21788

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 190 (USSR)

AUTHOR: Shul'vas, M. D.

TITLE: Determination of Magnetic Iron Oxide in Sediments of Non-metallic Impurities (Opredeleniye magnitnoy okisi zheleza v osadke nemetallicheskikh vklucheniy)

PERIODICAL: Tr. Nevsk. mashinostroit. z.-da, 1957, Nr 2, pp 81-82

ABSTRACT: For the determination of magnetite (Fe_3O_4) in the sediment of nonmetallic impurities (NI) a magnetic separator is used which is immersed into the beaker containing NI and moved over the bottom of the beaker. It is then removed and the magnetite is transferred into a beaker. For a complete separation of Fe_3O_4 from NI sediment this operation is repeated several times. The Fe_3O_4 is then treated with HCl (1:1) while heating to complete dissolution, and the Fe is determined in the solution by the colorimetric method.

1. Magnetic iron oxides---Determination 2. Metals A. M.
---Impurities

Card 1/1

SHUL'VAS, M. L.

met ✓ Opredelenie neometallicheskikh vkljuchenii v zharoprov-
nykh staliakh (The Determination of Non-Metallic In-
clusions in Heat-Resistant Steels). Compiled by M. L.
Shul'vas. Moscow: Mashgiz. 1955. 44 pp. r. l. f. 10.

met
mk

SHULVATIKOVA, N. V.

Fractionation of cellulose with cuprammonium solutions.
N. V. Shulyatikova and D. I. Mandel'baum. *Zhur. Priklad. Khim. (J. Applied Chem.)* 24, 264-73 (1951).—Variation of the gross amt. of the cuprammonium soln. with low Cu concn. can be used as a basis for fractionation of cellulose, since the soln. of cellulose requires not only a particular concn. of Cu but also a certain total amt. of Cu soln. for formation of the Cu-cellulose complex. At 0° in air insol. portions are almost completely resistant to oxidative destruction by the cuprammonium soln. Fractions that are regenerated from soln. always show an increase of the degree of polymerization. A cellulose specimen is stirred 5-10 min. in an aq. medium, filtered by suction, air-dried to 7-9% H₂O, and a 1-g. sample is placed in a dark-glass vessel (500 ml.) and treated with the desired cuprammonium soln. for 2 hrs. at 0° with stirring; the insol. portion is filtered by suction and washed with 15% NH₄OH, H₂O, 10% AcOH, and H₂O and dried. The best cuprammonium soln. contains 0.25-0.26% Cu. The results of fractionation of several specimens in respect to mol. wt. distribution are given graphically. G. M. Kosolapoff

A 5 - SHULVUO, Z.I.

Albras 1163

Chemomechanical lapping. Z. I. Sarulvuo, *Stank i instrument*, 13 [3] 36-37 (1944); *TsD. Dostizh-Riv.*, 5 [5] 14H (1945).—A lapping device for sintered carbide plates has been developed by the Russian State Optical Institute. By chemomechanical action the cobalt bond of the sintered carbide is attacked, and the tungsten carbide grain is exposed. No heat is generated; hence no cracks develop, and waste is considerably reduced. For lapping, the sintered carbide plates are shellacked to a brass disk so that the faces to be lapped lie in one plane, no matter how thick the plates are. The lapping operation is speedily performed in a special machine of simple construction with a comparatively soft abrasive medium suspended in a 20 to 25% solution of CuSO₄. 1 illustration. P.G.

S/056/62/043/004/055/061
B104/B186

ππ-interaction during multiple ...

$$\pi^- + p \rightarrow 2\pi^- + \pi^+ + p + k\pi^0, \quad (3)$$

$$\pi^- + p \rightarrow 3\pi^- + 2\pi^+ + p + k\pi^0 \quad (4)$$

were excluded by identifying the protons from their momenta and by estimating the ionization. The numbers of possible combinations $(\pi^-\pi^-, \pi^+\pi^+, \pi^+\pi^-, \pi^-\pi^0)$ as functions of the effective masses have sharp maxima at the mass values of 0.33, 0.44, 0.56, 0.76, 0.99. Evidently, there are resonances at these mass values in the systems with two pions. It is proved that one and the same pion is not involved in two maxima. It is concluded that in systems with equal mass values, but with different isotopic spins and mechanical spins, there exist two resonance systems. This means that in the case of strong interaction there is a degeneracy with respect to the two spins. There are 2 figures and 1 table.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki Akademii nauk SSSR (Institute of Theoretical and Experimental Physics of the Academy of Sciences USSR)

SUBMITTED: June 20, 1962

Card 2/2

S/056/63/044/C02/004/065
B102/B186

AUTHORS: Aynutdinov, M. S., Zombkovskiy, S. M., Nikitin, S. Ya.,
Selektor, Ya. M., Shulyachenko, V. N.

TITLE: Multiple production of pions in 7.2 Bev $\pi^- p$ collisions

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,
no. 2, 1963, 413-420

TEXT: The authors here continue previous investigations (ZhETF, 15:3,
1961) in which they had shown that the resonances observed in inelastic πp
collisions (cf. e.g. Phys. Rev. Lett., 6, 624, 628, 1961) play an
important part in multiple pion production. Now the angular and momentum
distributions of pions and protons are investigated for inelastic $\pi^- p$
interactions of various multiplicities. The resonances arising in three-
and four-pion systems are also studied, and the results are compared with
the statistical theory. The measurements were made in a liquid-hydrogen
bubble chamber positioned in a magnetic field of 13.5 koe. The π^- beam
was obtained from the inner Be target of a proton synchrotron. The mean
beam energy was 7.2 Bev, the π^- momentum distribution was Gaussian with a

Card 1/2

S/056/63/044/002/004/065

B102/B186

Multiple production of pions ...

spread of $\sigma_T \pm 0.8$ Bev/c. A total of 13,000 emulsion plates were scanned, and among 1590 np interaction events found, there were 192 elastic ones. The mean multiplicity was ≈ 3.6 , i.e. there were 2-, 4-, 6- and 8-pronged stars with a percentage of 36.6, 49.3, 13.2, and 0.8%, respectively; the cross-sections were 10.0, 13.5, 3.6, and 0.2 mb. The total cross-section was $\sigma_{tot} = 31.0 \pm 3.1$ mb, and $\sigma_{el} = 3.90 \pm 0.54$, $\sigma_{inel} = 27.1 \pm 0.3$ mb.

For 2-, 4-, and 6-pronged stars in the c.m.s. the proton momentum distributions differ greatly, whereas the proton angular distributions and the π^+ momentum distributions are more similar. The $\pi\pi$ -resonances arising in multiple pion production play the main role. It is assumed that in this process resonance states of three or four pions are formed, which decay into lower ones or pions. This is verified in determination of the effective masses of all possible combinations of charged pions for four-pronged stars and in an investigation of the existence of bound states with energies ≈ 1.5 Bev. There are 12 figures and 2 tables.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki (Institute of Theoretical and Experimental Physics)

SUBMITTED: July 21, 1961
Card 2/2

AYNUTDINOV, M.S.; ZOMBKOVSKIY, S.M.; PLETNIKOV, A.A.; SELEKTOR, Ya.M.;
SHULYACHENKO, V.N.

Elastic scattering of 3.5 Bev./cm²-mesons by protons. Zhur.
eksp. i teor. fiz. 45 no.2:392-394 Ag '63. (MIRA 16:9)

1. Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR.
(Mesons--Scattering)

AYNUTDINOV, M.S.; ZOMBKOVSKIY, S.M.; SELEKTOR, Ya.M.; SHULYACHENKO, V.N.

Studying $\pi\pi$ -resonances in π -p-collisions at a primary
 π -meson momentum of 3.5 Bev/c. Zhur. eksp. i teor. fiz. 45
no. 5:1682-1684 N '63. (MIRA 17:1)

1. Institut teoreticheskoy i eksperimental'noy fiziki.

ACCESSION NR: AP4042376

S/0056/64/047/001/0100/0106

AUTHORS: Aynutdinov, M. S.; Zombkovskiy, S. M.; Selektor, Ya. M.;
Shulyachenko, V. N.

TITLE: Inelastic interaction of 3.5-BeV/c negative pions with
protons

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 100-106

TOPIC TAGS: inelastic scattering, negative pi meson, pion scatter-
ing, proton scattering, resonance scattering, bubble chamber

ABSTRACT: This investigation was motivated by the growing evidence
that the statistical theory cannot explain multiple production pro-
cesses in either pion proton or proton proton collisions. The nega-
tive pion beam from the ITEF proton synchrotron was momentum-analyzed
by a deflecting magnet, collimated, and directed to a liquid-hydrogen
bubble chamber of 25 cm diameter, placed in a 14 kOe field. Particu-

1/3

ACCESSION NR: AP4042376

lar attention was paid to two-prong stars, that is, the reactions

| | $\bar{p}^0(\pi^-)$ | $\bar{p}^0(\pi')$ | $\bar{p}_\perp(\pi^-)$ | $\bar{p}_\perp(\pi')$ |
|------------------------|--------------------|-------------------|------------------------|-----------------------|
| Двухлучевые звезды: | 500 ± 15 | 450 ± 15 | 325 ± 50 | 345 ± 35 |
| Четырехлучевые звезды: | 380 ± 15 | — | 360 ± 40 | — |

The angular and momentum distribution of the secondary particles are presented. For the reaction $\pi^- + p \rightarrow \pi^- + \pi^+ + n$ there were observed two resonances with masses ~ 750 (ρ^0 meson) and ~ 1250 (f^0 meson) MeV. The angular distributions of the two reactions offer evidence in favor of the one-pion exchange mechanism. A hypothesis is advanced that simultaneous production of a ρ^0 meson and isobars with masses ~ 1300 MeV is possible. "The authors thank A. I. Alikhanov for numerous useful discussions, the mathematics group headed by R. S. Guter for the calculations, and the photograph scanning group headed by D. I. Tumanova and N. V. Vasil'yeva." Orig. art. has: 8 figures and 2 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki

2/3

ACCESSION NR: AP4042376

(Institute of Theoretical and Experimental Physics)

SUBMITTED: 19Feb64

ENCL: 00

SUB CODE: NP

NR REF SOV: 000

OTHER: 005

3/3

AYNUTDINOV, M.S.; ZOMBKOVSKIY, S.M.; SELEKTOR, Ya.M.; SHULYACHENKO, V.N.

Studying the reaction $\pi^- + p \rightarrow 2 \pi^- + 2 \pi^+ + k \pi^0 + n$
at a momentum of primary π^- -mesons of 3.5 Bev./c. Zhur. eksp.
i teor. fiz. 47 no.1:383-385 J1 '64. (MIRA 17:9)

1. Institut teoreticheskoy i eksperimental'noy fiziki
Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii
SSSR.

AYNUTDINOV, M.S.; VASIL'YEV, N.V.; ZOMBKOVSKII, S.M.; SELIKOV, Yu.N.;
SHULYACHENKO, V.N.

Study of four-pointed stars in \bar{p} -interactions at a primary
momentum of 3.5 Gev./s. IAd. fiz. 1 no.6:1071-1078 Je '65.
(MIRA 18:6)
1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudarst-
vennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

FORTUSHNYI, V. A., NOVIKOV, V. M. (Candidates of Veterinary Sciences) and SHULYAK
(Junior Scientific Co-Worker, Ukrainian Scientific Research Institute of Experimental
Veterinary Medicine)

"To study and disseminate leading experience of animal breeders and veterinary
specialists in the Ukrainian SSR"

Veterinariya, vol. 39, no. 7, July 1962 p. 24

SHULYAK, A.M., polkovnik med.sluzhby

Organization of help for the deaf in the armed forces. Voen.
med.zhur. no.12: 40-42 D'57 (MIRA 11:5)
(HEARING DISORDERS, therapy,
in armed forces personnel (Rus))
(ARMED FORCES PERSONNEL, dis.
hearing disord., organiz. of aid (Rus))

SHULYAK, B. A.

PA 35/49T79

USSR/Nuclear Physics - Cosmic Radiation Aug 48
Nuclear Physics - Counters, Elec-
tronic

"Generation of Cosmic Ray Showers Under Great Thick-
nesses of Lead at Various Heights," L. V. Kurnosova,
B. A. Shulyak, Phys Inst imeni P. N. Lebedev, Acad
Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXI, No 6

States results of investigations where counters were
used to determine the nature of particles found in
cosmic rays which are capable of producing showers
under thick slabs of lead. Submitted by Acad S. I.
Vavilov, 21 Jun 48.

35/49T79

SHULYAK, B.A.

Dynamics of sand microconfigurations in the coastal zone. Trudy
Inst. okean. 28:59-70 '58. (MIRA 11:5)
(Sand) (Seashore)

3.6000

AUTHOR:

Shulyak, B. A.

68978

S/020/60/131/02/016/071

B013/B011

TITLE:

On the Parameters of the Structure of a Deformable Bottom of an Undulatory Flow

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 2, pp 275 - 278 (USSR)

ABSTRACT: The present paper deals with the investigation results of the dependence of the parameters of periodic microstructure (ripples) on the parameters of an undulatory flow and on the constants of fluids and particles. Furthermore, the author deals with the dependence of particle shift velocity and of the amount of the particle flux on the parameters of the undulatory flow. These investigations were made in a 15-meter wave trough with a cross section of $0.5 \times 0.8 \text{ m}^2$ at periods of $0.9 \text{ sec} \leq \tau_{\text{wave}} \leq 5.0 \text{ sec}$ and for wave heights of $4 \text{ cm} \leq h_{\text{wave}} \leq 20 \text{ cm}$ with a depth of $H = 0.4 \text{ m}$ of the flow.

$$v'_{\text{wave}} = \frac{2\pi}{\tau_{\text{wave}}} \frac{h_{\text{wave}}}{2} \frac{1}{\text{sh } KH}$$
 holds with a rather fair accuracy.

Figure 1 shows the measured dependence of the height h_r and of the distance λ_r of the ripples on the flow parameters. In dimensionless

Card 1/4

On the Parameters of the Structure of a Deformable
Bottom of an Undulatory Flow

68978
S/020/60/131/02/016/071
B013/B011

quantities $\Pi = 7.24 \cdot 10^{-2} / \text{sh } kH$, $\Delta = 4.02 \cdot 10^{-1} / \text{sh } kH$ is valid, where $\Pi = h_r / (h_{\text{wave}} + h_o)$; $\Delta = \lambda_r (h_{\text{wave}} + h_o)$ and $h_o = v_o \tau_{\text{wave}} \text{sh } kH / \pi$. k denotes the wave number, and $v_o = 9.52 \text{ cm/sec}$ is a constant. The above expressions (1) for Π and Δ describe all the ripple parameters in their range of existence in water which is neither too deep nor too shallow. Therefrom the relation $\lambda_r = 5.55 h_r$ results, which holds at every phase and for every shape of the ripple. The last-mentioned relation (2) does not depend on flow inhomogeneity and instability and on standing waves. $\Pi \sim (d^3 \rho_T g / \rho_{\text{liq}} v^2)^n$ holds, where ρ_{liq} - density of the liquid, g - gravitational acceleration, ρ_T - density of the particles. The exponent n may be determined by experiment; with $n = 0.1$ the following holds:

$$\Pi = 4.14 \cdot 10^{-2} \left(\frac{d^3 \rho_T g}{\rho_{\text{liq}} v^2} \right)^{0.1} \frac{1}{\text{sh } kH} \quad \Delta = 2.30 \cdot 10^{-1} \left(\frac{d^3 \rho_T g}{\rho_{\text{liq}} v^2} \right)^{0.1} \frac{1}{\text{sh } kH}.$$

The investigation performed by the author confirms G. H. Darwin's opinion (Ref 2) concerning the role of vortices in the dynamics of

Card 2/4

On the Parameters of the Structure of a Deformable
Bottom of an Undulatory Flow

68978
S/020/60/131/02/016/071
B013/B011

the ripples. In the interaction mechanism of the flow of the deformed bottom there are two opposite processes. One of them is connected with the action of the vortex-like part of the flow. The other process depends on the action of the potential part of the flow and is caused by the separation of material from the ridges of the ripple. The stability of the particles on the ridge of the ripple increases with decreasing viscosity and density of the flow and with increasing weight of the particles. This stability decreases with increasing velocity. In an undulatory flow, the dependence of the velocity of ripple shift and particle flux of the deposits moved in the layer near the bottom is much more complicated than in a propagating flow. In this case, the integral particle flux Q_{wave} during one wave period consists of eight components. A rather voluminous expression is given for the experimental dependence of the particle flux on the period and the velocities per unit length of the wave front near the bottom. Next, an expression is given for the general form of the dependence of the ripple shift velocity on the parameters of the undulatory flow. These results permit the investigation of all the periodic forms of the undulatory and

Card 3/4

On the Parameters of the Structure of a Deformable
Bottom of an Undulatory Flow

68978

S/020/60/131/02/016/071
B013/B011

propagating flow from a uniform aspect. The author thanks
V. V. Longinov for supervising this work and G. I. Barenblatt for
his assistance and interest. There are 1 figure and 8 references,
4 of which are Soviet.

ASSOCIATION: Chernomorskaya eksperimental'naya nauchno-issledovatel'skaya
stantsiya Instituta okeanologii Akademii nauk SSSR (Black Sea Ex-
perimental Scientific Research Station of the Institute of
Oceanology of the Academy of Sciences of the USSR)

PRESENTED: September 11, 1959, by P. Ya. Kochina, Academician

SUBMITTED: August 15, 1959

Card 4/4

SHULYAK B.A.

Kinematics of the wave flux propagating over the ridged surface
of the bottom. Okeanologija 1 no.3:473-484 '61. (MIRA 16:11)

1. Institut okeanologii AN SSSR.

SHULYAK, B.A.

Periodic bottom structures of the wave flux. Okeanologija 1
no.5:871-865 '61. (MIRA 15:3)

1. Institut okeanologii AN SSSR.
(Ripple marks) (Waves)

SHULYAK, B.A.

Method preventing the blocking up of maritime and river hydraulic structures with sand and silt. Trudy Okean.kom. 8:192-194 '61.
(MIRA 14:5)

1. Chernomorskaya nauchno-issledovatel'skaya stantsiya Instituta
okeanologii AN SSSR.
(Sedimentation and deposition)
(Hydraulic engineering)

SHULYAK, B.A.

Some problems concerning the interaction of the wave flux with the
bottom during its deformation at low speeds. Trudy Inst. okean.
48:202-265 '61. (MIRA 15:1)
(Waves) (Sedimentation and deposition)

SHULYAK, B.A.

Wave flux parameters as determined from the parameters of periodic bottom structures formed by the flux. Dokl. AN SSSR 137 no.3:580-583 Mr '61. (MIRA 14:2)

1. Chernomorskaya eksperimental'naya nauchno-issledovatel'skaya stantsiya Instituta okeanologii AN SSSR. Predstavлено академиком D.I.Shcherbakovym.
(Ocean bottom) (Waves)